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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,801	02/23/2004	Isadore Cooperman	19699.0004	5445

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EXAMINER

COURSON, TANIA C

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,801

Applicant(s)

COOPERMAN, ISADORE

Examiner

Tania C. Courson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-7, 9-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 3,786,777) in view of Pereyra et al (US 5,964,181).

Smith et al. disclose a temperature indicator including the following:

With respect to claim 1:

- a) a housing (Fig. 1, package 10) having a first surface (Fig. 1, indicator material 16), at least a portion of said first surface being of a first color (column 3, line 65 to column 4, line 2), a first reactant (column 3, line 65 to column 4, line 2) located within said housing (Fig. 1) and a capsule (Fig. 1, frangible container 18) containing a liquid and a second reactant (Fig. 1, liquid 20 and column 6, lines 40-48), said capsule being located within said housing (Fig. 1), wherein said liquid freezes at the threshold temperature (column 6, lines 40-48) and expands upon freezing (column 4, line 6), wherein said first and said second reactants cooperate to produce a mixture upon mixing (column 6, lines 40-48) and wherein said mixture is of a second color (column 6, lines 40-48), said second color being different than said first color (column 6, lines 40-48).

With respect to claim 9:

- a) a housing (Fig. 1, package 10) defining an interior (Fig. 1, indicator material 16), at least a portion of said interior being of a first color (column 3, line 65 to column 4, line 2), a first reactant (column 3, line 65 to column 4, line 2) located within said housing (Fig. 1) and a capsule (Fig. 1, frangible container 18) containing a liquid and a second reactant (Fig. 1, liquid 20 and column 6, lines 40-48), said capsule being located within said interior of said housing (Fig. 1), wherein said liquid freezes at the threshold temperature (column 6, lines 40-48) and expands upon freezing (column 4, line 6), wherein said first and said second reactants cooperate to produce a mixture upon mixing (column 6, lines 40-48) and wherein said mixture is of a second color (column 6, lines 40-48), said second color being different than said first color (column 6, lines 40-48).

With respect to claims 2-4, 6-7, 10-11 and 13:

- a) wherein the threshold temperature is less than the temperature at which water freezes (column 6, lines 40-48),;
- b) wherein the threshold temperature is greater than the temperature at which water freezes (column 6, lines 40-48);
- c) wherein said capsule is designed such that it will fracture due to the expansion of said liquid upon freezing (column 4, lines 4-5);

- d) wherein said housing has a second surface (Fig. 1, transparent dome 13) opposite said first surface (Fig. 1), said second surface including a transparent portion for allowing one to view said first surface (Fig. 1);
- e) wherein said housing has a third surface (Fig. 1, bottom portion 14), said third surface having an adhesive attached thereto for attaching said device to a product to be monitored (column 4, lines 17-19).

Smith et al. do not disclose wherein a mixture is a pigment.

Pereyra et al. teach an indicating device that consists of wherein a mixture is a pigment (column 12, lines 26-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the temperature indicator of Smith et al., so as to include wherein a mixture is a pigment, as taught by Pereyra et al., so as to provide a means for increasing visibility during use of the indicator (column 12, lines 41-42).

3. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. and Pereyra et al., as applied to claims 1-4, 6-7, 9-11 and 13, as stated above, and further in view of Berger (US 4,022,149).

Smith et al. and Pereyra et al. disclose a temperature indicator as stated above in paragraph 2.

They do not disclose wherein a capsule is designed such that it will melt at a predetermined temperature.

Berger teaches a thaw indicator that contains wherein a capsule is designed such that it will melt at a predetermined temperature (column 2, lines, 27-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the temperature indicator of Smith et al. and Pereyra et. al., so as to include a capsule designed such that it will melt at a predetermined temperature, as taught by Berger, in order to ensure a visual determination of a temperature drop during use of the indicator.

4. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Pereyra et al.

Smith et al. disclose a temperature indicator including the following:

With respect to claim 15:

- a) a housing (Fig. 1, package 10) defining an interior (Fig. 1, indicator material 16), said interior being of a first color (column 3, line 65 to column 4, line 2), a capsule (Fig. 1, frangible container 18) located within said interior of said housing (Fig. 1), said capsule defining an interior volume (Fig. 1) and containing a liquid and a first reactant within said volume (Fig. 1, liquid 20 and column 6, lines 40-48), said capsule having an exterior surface (Fig. 1) and a second reactant located on said exterior surface of said capsule (column 3, line 65 to column 4, line 2), wherein said liquid freezes at the threshold temperature (column 6, lines 40-48) and expands upon freezing (column 4, line 6), wherein said first and said second reactants cooperate to produce a mixture upon mixing (column 6, lines 40-48) and wherein said mixture is of a

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second color (column 6, lines 40-48), said second color being different than said first color (column 6, lines 40-48).

With respect to claims 16-17:

- a) wherein the threshold temperature is less than the temperature at which water freezes (column 6, lines 40-48);
- b) wherein the threshold temperature is greater than the temperature at which water freezes (column 6, lines 40-48).

Smith et al. do not disclose wherein a mixture is a pigment.

Pereyra et al. teach an indicating device that consists of wherein a mixture is a pigment (column 12, lines 26-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the temperature indicator of Smith et al., so as to include wherein a mixture is a pigment, as taught by Pereyra et al., so as to provide a means for increasing visibility during use of the indicator (column 12, lines 41-42).

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. and Pereyra et al., as applied to claims 15-17, as stated above, and further in view of Berger.

Smith et al. and Pereyra et al. disclose a temperature indicator as stated above in paragraph 4

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They do not disclose wherein a capsule is designed such that it will melt at a predetermined temperature.

Berger teaches a thaw indicator that contains wherein a capsule is designed such that it will melt at a predetermined temperature (column 2, lines, 27-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the temperature indicator of Smith et al. and Pereyra et. al., so as to include a capsule designed such that it will melt at a predetermined temperature, as taught by Berger, in order to ensure a visual determination of unsafe temperatures during use of the indicator (column 1, lines 57-60).

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Pereyra et al.

Smith et al. disclose a temperature indicator including the following:

With respect to claim 20:

- a) a housing (Fig. 1, package 10) having a first surface (Fig. 1, indicator material 16), at least a portion of said first surface being of a first color (column 3, line 65 to column 4, line 2), a capsule (Fig. 1, frangible container 18) containing a liquid and a first reactant (Fig. 1, liquid 20 and column 6, lines 40-48), said capsule being located within said housing (Fig. 1) and a second reactant (column 3, line 65 to column 4, line 2), wherein said liquid freezes at the

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threshold temperature (column 6, lines 40-48) and expands upon freezing (column 4, line 6);

- b) wherein said capsule is designed such that it will fracture due to the expansion of said liquid upon freezing (column 4, lines 4-5);
- c) wherein said first and said second reactants cooperate to produce a mixture upon mixing (column 6, lines 40-48) and wherein said mixture is of a second color (column 6, lines 40-48), said second color being different than said first color (column 6, lines 40-48).

With respect to claims 21-22:

- a) wherein said second reactant is located within said housing (Fig. 1);
- b) wherein said second reactant is located on an exterior surface of said capsule (Fig. 1).

Smith et al. do not disclose wherein a capsule is designed such that it will melt at a predetermined temperature and wherein a mixture is a pigment.

Berger teaches a thaw indicator that contains wherein a capsule is designed such that it will melt at a predetermined temperature (column 2, lines, 27-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the temperature indicator of Smith et al., so as to include a capsule designed such that it

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will melt at a predetermined temperature, as taught by Berger, in order to ensure a visual determination of unsafe temperatures during use of the indicator (column 1, lines 57-60).

Pereyra et al. teach an indicating device that consists of wherein a mixture is a pigment (column 12, lines 26-32). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the temperature indicator of Smith et al., so as to include wherein a mixture is a pigment, as taught by Pereyra et al., so as to provide a means for increasing visibility during use of the indicator (column 12, lines 41-42).

Allowable Subject Matter

7. Claims 5, 12, 18 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable by correcting the double patenting rejection by providing a terminal disclaimer and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In*

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re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1, 4-9, 12-15 and 18-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-10 of U.S. Patent No. 6,694,913 B2 (Cooperman). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 4-9, 12-15 and 18-23 of the current application are broader claims than claim 1-10 of U.S. Patent No. 6,694,913 B2 (Cooperman) by deleting the capsules made of wax and wherein the housing is resistant to crushing. Furthermore it is implied that a wax capsule would melt upon reaching a specific temperature.

10. Claims 2-3, 10-11 and 16-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6 and 9 of U.S. Patent No. 6,694,913 B2 (Cooperman) in view of US Patent No. 3,786,777 (Smith et al.). The limitations as stated in claims 2-3, 10-11 and 16-17 are already indicated in the combination of

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claims 1, 6 and 9 of U.S. Patent No. 6,694,913 B2 (Cooperman) in view of U.S. Patent No. 3,786,777 (Smith et al.).

Claim 1 of Cooperman '913 claims a device for indicating a transition from a frozen condition to a thawed condition, comprising: a housing having a first surface, at least a portion of said first surface being of a first color; a first reactant located within said housing; and a capsule containing a liquid and a second reactant, said capsule being located within said housing; wherein said liquid expands upon freezing; wherein said first and said second reactants cooperate to produce a pigment upon mixing; and wherein said pigment is of a second color, said second color being different than said first color.

Claim 6 of Cooperman '913 claims a device for indicating a transition from a frozen condition to a thawed condition, comprising: a housing defining an interior, at least a portion of said interior being of a first color; a first reactant located within said housing; and a capsule containing a liquid and a second reactant, said capsule being located within said interior of said housing; wherein said liquid expands upon freezing; wherein said first and said second reactants cooperate to produce a pigment upon mixing; and wherein said pigment is of a second color, said second color being different than said first color.

Claim 9 of Cooperman '913 claims a device for indicating a transition from a frozen condition to a thawed condition, comprising: a housing defining an interior, said interior being of a first color; a capsule located within said interior of said housing, said capsule defining an interior volume and containing a liquid and a first reactant within said volume, said capsule having an exterior surface; and a second reactant located on said exterior surface of said

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capsule; wherein said liquid expands upon freezing; wherein said first and said second reactants cooperate to produce a pigment upon mixing; and wherein said pigment is of a second color, said second color being different than said first color.

Claims 1, 6 and 9 of Cooperman '913 do not disclose wherein the threshold temperature is less than or greater than the temperature at which water freezes.

Smith et al. teach a temperature indicator that consists of wherein the threshold temperature is less than or greater than the temperature at which water freezes (column 6, lines 40-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the condition indicator of Cooperman, so as to include wherein the threshold temperature is less than or greater than the temperature at which water freezes, as taught by Smith et al., so as to provide varying additives in order to produce the necessary color-producing reaction for viscosity control (column 6, lines 45-47).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited on PTO-892 and not mentioned above disclose a temperature indicator:

Waters (US 5,695,284)

Patel (US 5,254,473)

Manske et al. (US 4,132,186)

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Gleason et al. (US 3,233,459)

Geocarls (US 3,177,843)

Romito (US 2,850,393)

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (571) 272-2239.

The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez, can be reached on (571) 272-2245.

The fax number for this Organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DIEGO F.F. GUTIERREZ
SUPERVISORY PATENT EXAMINER
GROUP ART UNIT 2859

TCC
January 21, 2005